

Results of Directional Survey

API number:	30-025-40617		
OGRID:		Operator:	COG OPERATING LLC
		Property:	STRATOCONE 32 STATE # 1H

surface	ULSTR:	L	32	T	20S	R	35E
				2310	FSL	330	FWL

BH Loc	ULSTR:	I	32	T	20S	R	35E
15180	MD	10849.0	TVD	2300	FSL	328	FEL
						4952	FWL

Top Perf/OH	ULSTR:	L	32	T	20S	R	35E
10965	MD	10820.3	TVD	2149	FSL	746	FWL

Bot Perf/OH	ULSTR:	I	32	T	20S	R	35E
15085	MD	10849.1	TVD	2297	FSL	423	FEL
						4857	FWL

	MD	N/S	E/W	VD
	10933	-154.16	386.85	10810.71
TOP PERFS/OH	10965	-161.41	416.49	10820.32
	10965	-161.41	416.49	10820.32
	15067	-14.12	4508.75	10849.08
BOT PERFS/OH	15085	-13.45	4526.74	10849.08
	15102	-12.81	4543.73	10849.08

NEXT TO LAST	15102	-12.81	4543.73	10849.08
LAST READING	15180	-9.88	4621.67	10849.03
TD	15180	-9.88	4621.67	10849.03

Surface Location	2310	FS	330	FW
Projected BHL	2300	FS	4952	FW
Location of				
Top Perfs/OH	2149	FS	746	FW
Bottom Perfs/OH	2297	FS	4857	FW

SUMMARY of Subsurface Locations

Surface Location	L-32-20S-35E	2310	FS	330	FW	Vert. Depth
Top Perfs/OH	L-32-20S-35E	2149	FS	746	FW	10820.32
Bottom Perfs/OH	I-32-20S-35E	2297	FS	4857	FW	10849.08
Projected TD	I-32-20S-35E	2300	FS	4952	FW	10849.03

JUN 27 2013



McVAY DRILLING COMPANY
P.O. Box 2450
Hobbs, New Mexico 88241
(575) 397-3311
FAX: 39-DRILL

HOBBS OCD

MAY 31 2013

COG OPERATING, L
RECEIVED

MAR 27 2013

ARIESIA WEST

30-025-40617

Well Name and Num: Stratocone 32 State 1H
Location: Sec. 32, T20S, R35E
Operator: COG
Drilling Contractor: McVay Drilling Company

RECEIVED

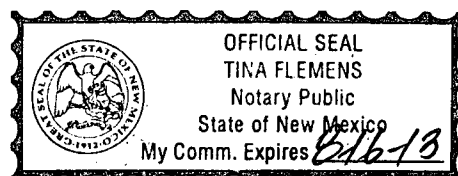
The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>
0.40	1125	1.40	7062	6.68	10397	88.64	14231
0.70	1410	1.70	7537	12.66	10493	89.96	15067
1.10	1820	1.10	8014	29.72	10616		
1.06	1909	1.00	8490	36.50	10680		
2.46	2670	1.20	8966	49.23	10775		
2.64	2860	0.88	9118	55.00	10839		
2.55	3050	2.46	9308	75.10	10965		
2.81	3526	0.79	9627	84.30	11025		
3.17	3810	0.90	9850	90.20	11346		
0.37	3905	0.97	10260	90.70	11634		
1.85	4285	1.58	10542	91.50	11920		
2.80	4759	1.58	11020	90.22	12012		
2.46	4859	1.85	11309	91.34	12379		
2.99	5328	1.93	11597	90.92	12564		
3.25	5677	1.49	11951	90.22	13028		
0.80	6115	1.10	10239	89.96	13492		
1.16	6589	4.30	10366	87.49	13769		

By: *Robert Crowl*

Subscribed and sworn to before me this 25th day of March, 2013

Tina Flemens
Notary Public, Lea County, New Mexico





HOBBS OCD

MAY 31 2013

RECEIVED

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

March 15, 2013

COG Operating LLC (Concho)
One Concho Center
600 W. Illinois Avenue
Midland, TX 79701

Attn: Kanicia Castillo

Re: **Stratocone 32 State No 001H**

30-025-40617

Please find enclosed a copy of the survey from 0' to 10,600' ran on the above referenced well.

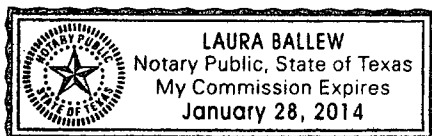
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

Sincerely,

Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 15th day of March, A.D., 2013, by Keith Havelka.



Laura Ballew
Notary Public, State of Texas



Company: COG Operating LLC (Concho)

Lease/Well: Stratocone 32 State/No 001H

Location: Sec. 32 20S 35 E

Rig Name: McVay #7

State/County: New Mexico /Lea

Latitude: 32.53, Longitude: -103.49

GRID North is 0.46 Degrees East of True North

VS-Azi: 90.15 Degrees



30-025-40617

Depth Reference : RKB=17'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: final survey .ut

Minimum Curvature Method

Report Date/Time: 3/15/2013 / 09:46

Vaughn Energy Services

Fort Worth, Texas

817-741-3610

Surveyor: Tim Kaczor

Stratocone 32 State No 001H / API 30-025-40617

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MAY 31 2013

HOBBS OCD

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.28	218.20	100.00	-0.19	-0.15	-0.15	0.25	218.20	0.28
200.00	0.50	233.90	200.00	-0.64	-0.66	-0.66	0.92	225.59	0.24
300.00	0.48	231.84	299.99	-1.16	-1.34	-1.34	1.77	229.11	0.03
400.00	0.52	225.99	399.99	-1.74	-2.00	-1.99	2.65	229.01	0.07
500.00	0.63	217.95	499.98	-2.49	-2.66	-2.66	3.64	226.97	0.14
600.00	0.92	242.97	599.98	-3.28	-3.71	-3.71	4.96	228.52	0.44
700.00	0.99	246.83	699.96	-3.99	-5.22	-5.21	6.57	232.63	0.10
800.00	0.71	262.91	799.95	-4.40	-6.63	-6.62	7.96	236.41	0.36
900.00	0.52	255.20	899.95	-4.59	-7.68	-7.67	8.95	239.12	0.21
1000.00	0.28	251.96	999.94	-4.79	-8.36	-8.34	9.63	240.20	0.24
1100.00	0.28	252.01	1099.94	-4.94	-8.83	-8.82	10.12	240.77	0.00
1200.00	0.45	258.14	1199.94	-5.10	-9.45	-9.44	10.74	241.66	0.17
1300.00	0.18	246.66	1299.94	-5.24	-9.98	-9.97	11.27	242.29	0.27
1400.00	0.36	247.15	1399.94	-5.43	-10.42	-10.40	11.75	242.48	0.18
1500.00	0.23	259.36	1499.94	-5.59	-10.91	-10.89	12.25	242.88	0.14
1600.00	0.39	274.33	1599.93	-5.60	-11.45	-11.43	12.74	243.94	0.17
1700.00	0.55	254.90	1699.93	-5.70	-12.25	-12.24	13.51	245.05	0.23
1800.00	0.91	243.34	1799.92	-6.18	-13.42	-13.41	14.78	245.28	0.38

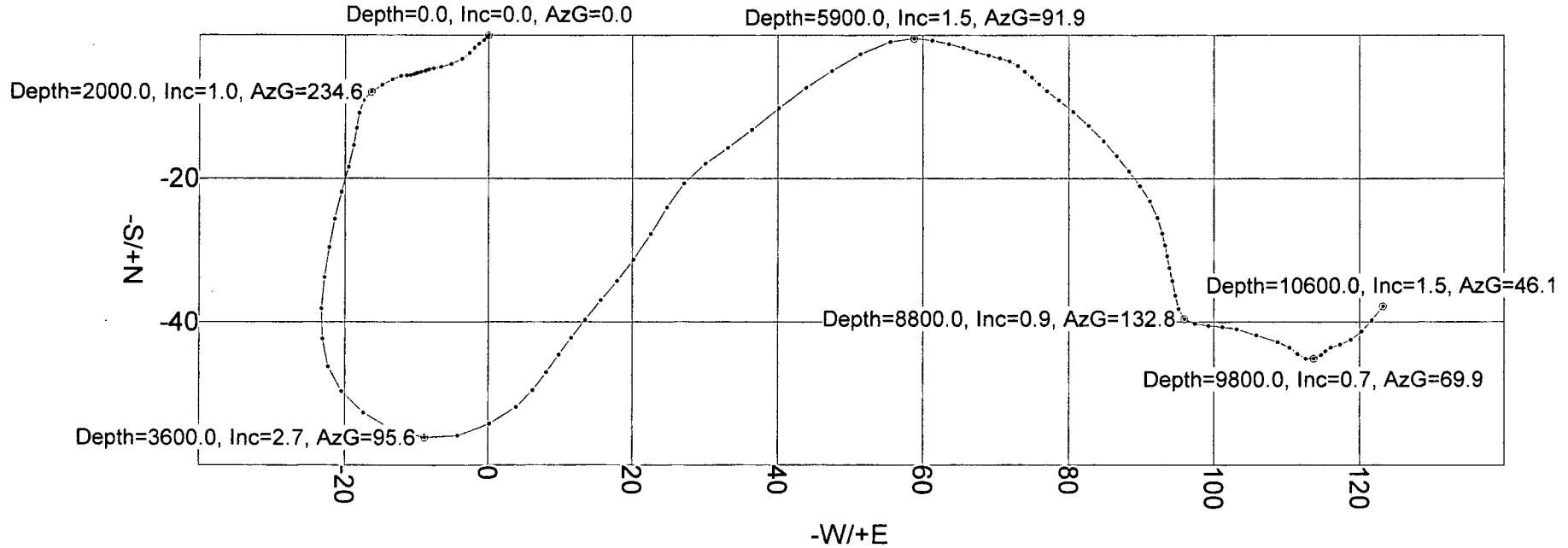
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.98	240.82	1899.91	-6.95	-14.88	-14.86	16.42	244.96	0.09
2000.00	1.01	234.56	1999.89	-7.88	-16.34	-16.32	18.14	244.26	0.11
2100.00	0.95	209.34	2099.88	-9.11	-17.47	-17.44	19.70	242.45	0.43
2200.00	1.20	189.37	2199.86	-10.87	-18.04	-18.02	21.07	238.94	0.45
2300.00	1.25	188.67	2299.84	-12.98	-18.38	-18.34	22.50	234.77	0.05
2400.00	1.56	191.81	2399.81	-15.38	-18.82	-18.78	24.31	230.74	0.32
2500.00	2.01	194.29	2499.76	-18.41	-19.53	-19.48	26.84	226.70	0.46
2600.00	2.12	196.74	2599.70	-21.88	-20.50	-20.44	29.98	223.13	0.15
2700.00	2.30	191.42	2699.62	-25.62	-21.43	-21.36	33.40	219.91	0.27
2800.00	2.33	189.22	2799.54	-29.60	-22.15	-22.07	36.97	216.81	0.10
2900.00	2.49	188.61	2899.45	-33.75	-22.80	-22.71	40.73	214.04	0.16
3000.00	2.56	182.46	2999.35	-38.13	-23.22	-23.12	44.64	211.34	0.28
3100.00	2.28	173.39	3099.27	-42.34	-23.09	-22.98	48.22	208.61	0.47
3200.00	2.27	164.05	3199.19	-46.22	-22.32	-22.19	51.32	205.77	0.37
3300.00	2.32	140.15	3299.11	-49.68	-20.48	-20.35	53.73	202.40	0.95
3400.00	2.61	129.34	3399.02	-52.67	-17.42	-17.28	55.48	198.30	0.55
3500.00	2.74	111.64	3498.91	-55.00	-13.44	-13.29	56.61	193.73	0.83
3600.00	2.71	95.57	3598.80	-56.11	-8.87	-8.72	56.80	188.98	0.76
3700.00	2.69	78.36	3698.69	-55.86	-4.22	-4.08	56.02	184.32	0.81
3800.00	2.79	60.81	3798.58	-54.20	0.20	0.34	54.20	179.79	0.84
3900.00	2.19	54.38	3898.48	-51.90	3.88	4.02	52.04	175.72	0.67
4000.00	1.77	36.45	3998.42	-49.55	6.35	6.48	49.95	172.69	0.74
4100.00	1.78	35.14	4098.37	-47.04	8.16	8.28	47.74	170.16	0.04
4200.00	1.69	35.41	4198.33	-44.57	9.91	10.02	45.66	167.47	0.09
4300.00	1.65	36.77	4298.29	-42.22	11.62	11.73	43.79	164.61	0.06
4400.00	1.99	37.44	4398.24	-39.69	13.53	13.64	41.93	161.17	0.34
4500.00	1.99	39.68	4498.18	-36.98	15.70	15.79	40.17	157.00	0.08
4600.00	2.00	40.05	4598.12	-34.30	17.93	18.02	38.71	152.40	0.01
4700.00	2.29	35.02	4698.05	-31.33	20.20	20.28	37.28	147.20	0.34
4800.00	2.66	31.93	4797.95	-27.73	22.57	22.64	35.75	140.86	0.40
4900.00	2.29	29.76	4897.86	-24.02	24.79	24.85	34.52	134.10	0.38
5000.00	2.42	39.98	4997.77	-20.67	27.14	27.19	34.11	127.29	0.44
5100.00	2.20	54.48	5097.69	-17.93	30.06	30.11	35.00	120.81	0.62
5200.00	2.14	53.72	5197.62	-15.71	33.13	33.17	36.67	115.37	0.07
5300.00	2.63	51.74	5297.54	-13.19	36.43	36.47	38.75	109.90	0.50
5400.00	2.86	50.22	5397.42	-10.17	40.15	40.18	41.42	104.21	0.25
5500.00	2.53	55.16	5497.31	-7.31	43.89	43.91	44.49	99.45	0.40
5600.00	2.41	58.46	5597.22	-4.95	47.49	47.50	47.75	95.95	0.19
5700.00	2.84	60.93	5697.11	-2.65	51.44	51.45	51.51	92.95	0.44

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	2.30	74.72	5797.01	-0.92	55.54	55.54	55.55	90.95	0.81
5900.00	1.51	91.89	5896.96	-0.43	58.79	58.79	58.79	90.42	0.97
6000.00	1.37	101.27	5996.93	-0.71	61.28	61.28	61.28	90.66	0.27
6100.00	1.32	102.83	6096.90	-1.20	63.57	63.57	63.58	91.08	0.06
6200.00	1.08	109.00	6196.88	-1.76	65.58	65.58	65.60	91.54	0.27
6300.00	1.07	106.13	6296.86	-2.32	67.37	67.37	67.41	91.98	0.05
6400.00	0.93	105.09	6396.84	-2.79	69.05	69.05	69.10	92.32	0.14
6500.00	0.83	104.78	6496.83	-3.19	70.53	70.54	70.61	92.59	0.10
6600.00	0.79	110.70	6596.82	-3.62	71.89	71.89	71.98	92.88	0.09
6700.00	0.72	129.60	6696.81	-4.27	73.02	73.03	73.14	93.35	0.26
6800.00	0.68	130.35	6796.81	-5.06	73.96	73.97	74.13	93.91	0.04
6900.00	0.75	131.56	6896.80	-5.88	74.91	74.92	75.14	94.49	0.07
7000.00	0.82	135.12	6996.79	-6.82	75.90	75.92	76.21	95.13	0.08
7100.00	0.88	128.33	7096.78	-7.80	77.00	77.02	77.40	95.78	0.12
7200.00	1.48	128.54	7196.76	-9.08	78.61	78.63	79.13	96.59	0.60
7300.00	1.46	130.31	7296.72	-10.70	80.59	80.62	81.30	97.57	0.05
7400.00	1.83	134.23	7396.68	-12.64	82.71	82.74	83.67	98.69	0.38
7500.00	1.61	137.61	7496.64	-14.80	84.80	84.84	86.08	99.90	0.24
7600.00	1.55	140.60	7596.60	-16.88	86.61	86.65	88.24	101.03	0.10
7700.00	1.54	142.08	7696.56	-18.99	88.30	88.35	90.31	102.14	0.04
7800.00	1.40	145.35	7796.53	-21.06	89.82	89.87	92.25	103.19	0.17
7900.00	1.44	149.04	7896.50	-23.14	91.16	91.22	94.05	104.24	0.10
8000.00	1.53	162.15	7996.46	-25.49	92.22	92.28	95.68	105.45	0.35
8100.00	1.06	165.91	8096.44	-27.66	92.85	92.92	96.88	106.59	0.47
8200.00	0.88	167.48	8196.42	-29.31	93.24	93.32	97.74	107.45	0.19
8300.00	0.91	170.03	8296.41	-30.84	93.55	93.63	98.50	108.25	0.05
8400.00	0.99	168.42	8396.40	-32.47	93.86	93.94	99.32	109.08	0.08
8500.00	1.17	167.92	8496.38	-34.31	94.25	94.34	100.30	110.01	0.19
8600.00	1.17	167.39	8596.36	-36.31	94.68	94.78	101.41	110.98	0.01
8700.00	1.03	165.49	8696.34	-38.18	95.13	95.23	102.51	111.87	0.15
8800.00	0.92	132.79	8796.33	-39.59	95.95	96.05	103.79	112.42	0.56
8900.00	0.97	99.05	8896.31	-40.27	97.37	97.47	105.37	112.47	0.55
9000.00	1.15	97.55	8996.30	-40.54	99.20	99.31	107.16	112.23	0.19
9100.00	1.12	92.52	9096.28	-40.71	101.18	101.29	109.06	111.92	0.10
9200.00	1.17	106.38	9196.26	-41.04	103.14	103.25	111.00	111.70	0.28
9300.00	2.10	107.22	9296.22	-41.87	105.87	105.98	113.85	111.58	0.93
9400.00	1.38	108.75	9396.17	-42.80	108.76	108.88	116.88	111.48	0.72
9500.00	0.74	129.31	9496.15	-43.60	110.40	110.52	118.70	111.55	0.74
9600.00	0.85	129.36	9596.14	-44.48	111.48	111.59	120.02	111.75	0.11

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
9700.00	0.63	110.80	9696.13	-45.14	112.56	112.68	121.27	111.85	0.32
9800.00	0.74	69.85	9796.13	-45.11	113.68	113.80	122.30	111.65	0.49
9900.00	0.56	55.19	9896.12	-44.61	114.69	114.80	123.06	111.26	0.24
10000.00	0.33	36.64	9996.12	-44.10	115.26	115.37	123.41	110.94	0.27
10100.00	0.74	65.07	10096.11	-43.60	116.01	116.13	123.94	110.60	0.48
10200.00	0.82	77.22	10196.10	-43.17	117.30	117.41	124.99	110.21	0.18
10300.00	1.06	55.35	10296.09	-42.49	118.75	118.86	126.13	109.69	0.42
10400.00	1.11	50.55	10396.07	-41.35	120.26	120.37	127.17	108.97	0.11
10500.00	1.31	31.66	10496.05	-39.75	121.61	121.72	127.95	108.10	0.44
10600.00	1.55	46.09	10596.02	-37.84	123.19	123.29	128.87	107.08	0.43



Vaughn Energy Services
Fort Worth, Texas
817-741-3610
Surveyor: Tim Kaczor
Stratocone 32 State No 001H / API 30-025-40617





30-025-40617

COG Stratocone 32 State #1H MWD 10200ft - Update Survey Geodetic Report

(Non-Def Survey)

PATHFINDER
A Schlumberger Company

Report Date: March 22, 2013 - 09:02 AM
Client: COG
Field: NM Lea County (NAD 27)
Structure / Slot: COG Stratocone 32 State #1H / COG Stratocone 32 State #1H
Well: Stratocone 32 State #1H
Borehole: ST01
UWI / API#: Unknown / Unknown
Survey Name: COG Stratocone 32 State #1H MWD 10200ft - Update
Survey Date: March 14, 2013
Tort / AHD / DDI / ERD Ratio: 179.486 ° / 4786.348 ft / 6.080 / 0.441
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 31' 42.81838", W 103° 29' 11.30922"
Location Grid N/E Y/X: N 557040.000 ftUS, E 761008.600 ftUS
CRS Grid Convergence Angle: 0.4554 °
Grid Scale Factor: 0.99998711

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 90.147 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3751.000 ft above
Seabed / Ground Elevation: 3734.000 ft above
Magnetic Declination: 7.459 °
Total Gravity Field Strength: 999.1580 mgn (9.8 based)
Total Magnetic Field Strength: 48612.678 nT
Magnetic Dip Angle: 60.403 °
Declination Date: March 14, 2013
Magnetic Declination Model: BGGM 2012
North Reference: Grid North
Grid Convergence Used: 0.4554 °
Total Corr Mag North->Grid North: 7.0036 °
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	557040.00	761008.60	N 32 31 42.82	W 103 29 11.31
	100.00	0.28	218.20	100.00	-0.15	-0.19	-0.15	0.28	557039.81	761008.45	N 32 31 42.82	W 103 29 11.31
	200.00	0.50	233.90	200.00	-0.65	-0.64	-0.65	0.24	557039.36	761007.95	N 32 31 42.81	W 103 29 11.32
	300.00	0.48	231.84	299.99	-1.33	-1.16	-1.34	0.03	557038.84	761007.26	N 32 31 42.81	W 103 29 11.32
	400.00	0.52	225.99	399.99	-1.99	-1.73	-1.99	0.06	557038.27	761006.61	N 32 31 42.80	W 103 29 11.33
	500.00	0.63	217.95	499.98	-2.65	-2.48	-2.66	0.14	557037.52	761005.94	N 32 31 42.79	W 103 29 11.34
	600.00	0.92	242.97	599.98	-3.70	-3.28	-3.71	0.44	557036.72	761004.89	N 32 31 42.79	W 103 29 11.35
	700.00	0.99	246.83	699.96	-5.21	-3.98	-5.22	0.10	557036.02	761003.38	N 32 31 42.78	W 103 29 11.37
	800.00	0.71	262.91	799.95	-6.62	-4.40	-6.63	0.37	557035.60	761001.97	N 32 31 42.78	W 103 29 11.39
	900.00	0.52	255.20	899.95	-7.67	-4.59	-7.68	0.21	557035.41	761000.92	N 32 31 42.77	W 103 29 11.40
	1000.00	0.28	251.96	999.94	-8.34	-4.78	-8.35	0.24	557035.22	761000.25	N 32 31 42.77	W 103 29 11.41
	1100.00	0.28	252.01	1099.94	-8.81	-4.93	-8.82	0.00	557035.07	760999.78	N 32 31 42.77	W 103 29 11.41
	1200.00	0.45	258.14	1199.94	-9.42	-5.09	-9.43	0.17	557034.91	760999.17	N 32 31 42.77	W 103 29 11.42
	1300.00	0.18	246.66	1299.94	-9.95	-5.23	-9.96	0.28	557034.77	760998.64	N 32 31 42.77	W 103 29 11.43
	1400.00	0.36	247.15	1399.94	-10.38	-5.42	-10.40	0.18	557034.58	760998.20	N 32 31 42.77	W 103 29 11.43
	1500.00	0.23	259.36	1499.94	-10.87	-5.58	-10.88	0.14	557034.42	760997.72	N 32 31 42.76	W 103 29 11.44
	1600.00	0.39	274.33	1599.93	-11.41	-5.59	-11.42	0.18	557034.41	760997.18	N 32 31 42.76	W 103 29 11.44
	1700.00	0.55	254.90	1699.93	-12.21	-5.69	-12.22	0.22	557034.31	760996.38	N 32 31 42.76	W 103 29 11.45
	1800.00	0.91	243.34	1799.92	-13.38	-6.17	-13.40	0.39	557033.83	760995.20	N 32 31 42.76	W 103 29 11.47
	1900.00	0.98	240.82	1899.91	-14.83	-6.94	-14.85	0.08	557033.06	760993.75	N 32 31 42.75	W 103 29 11.48
	2000.00	1.01	234.56	1999.89	-16.30	-7.87	-16.32	0.11	557032.13	760992.28	N 32 31 42.74	W 103 29 11.50
	2100.00	0.95	209.34	2099.88	-17.42	-9.10	-17.44	0.43	557030.90	760991.16	N 32 31 42.73	W 103 29 11.51
	2200.00	1.20	189.37	2199.86	-17.99	-10.86	-18.02	0.45	557029.14	760990.58	N 32 31 42.71	W 103 29 11.52
	2300.00	1.25	188.67	2299.84	-18.32	-12.97	-18.35	0.05	557027.03	760990.25	N 32 31 42.69	W 103 29 11.52
	2400.00	1.56	191.81	2399.81	-18.76	-15.38	-18.80	0.32	557024.62	760989.80	N 32 31 42.67	W 103 29 11.53
	2500.00	2.01	194.29	2499.76	-19.46	-18.41	-19.51	0.46	557021.59	760989.09	N 32 31 42.64	W 103 29 11.54
	2600.00	2.12	196.74	2599.70	-20.42	-21.88	-20.47	0.14	557018.12	760988.13	N 32 31 42.60	W 103 29 11.55
	2700.00	2.30	191.42	2699.62	-21.34	-25.62	-21.40	0.27	557014.38	760987.20	N 32 31 42.57	W 103 29 11.56
	2800.00	2.33	189.22	2799.54	-22.05	-29.60	-22.13	0.09	557010.40	760986.47	N 32 31 42.53	W 103 29 11.57
	2900.00	2.49	188.61	2899.45	-22.69	-33.75	-22.78	0.16	557006.25	760985.82	N 32 31 42.49	W 103 29 11.58
	3000.00	2.56	182.46	2999.35	-23.10	-38.13	-23.20	0.28	557001.87	760985.40	N 32 31 42.44	W 103 29 11.58
	3100.00	2.28	173.39	3099.27	-22.96	-42.34	-23.06	0.47	556997.66	760985.54	N 32 31 42.40	W 103 29 11.58
	3200.00	2.27	164.05	3199.19	-22.17	-46.22	-22.29	0.37	556993.78	760986.31	N 32 31 42.36	W 103 29 11.57
	3300.00	2.32	140.15	3299.11	-20.32	-49.67	-20.45	0.95	556990.33	760988.15	N 32 31 42.31	W 103 29 11.55
	3400.00	2.61	129.34	3399.02	-17.26	-52.67	-17.39	0.55	556987.33	760991.21	N 32 31 42.30	W 103 29 11.52
	3500.00	2.74	111.64	3498.91	-13.27	-55.00	-13.41	0.83	556985.00	760995.19	N 32 31 42.28	W 103 29 11.47
	3600.00	2.71	95.57	3598.80	-8.69	-56.11	-8.84	0.76	556983.89	760999.77	N 32 31 42.26	W 103 29 11.42
	3700.00	2.69	78.36	3698.69	-4.04	-55.86	-4.18	0.81	556984.14	761004.42	N 32 31 42.27	W 103 29 11.36
	3800.00	2.79	60.81	3798.58	0.38	-54.20	0.24	0.84	556985.80	761008.84	N 32 31 42.28	W 103 29 11.31
	3900.00	2.19	54.38	3898.48	4.05	-51.90	3.92	0.68	556988.10	761012.52	N 32 31 42.30	W 103 29 11.27
	4000.00	1.77	36.45	3998.42	6.52	-49.55	6.39	0.74	556990.45	761014.99	N 32 31 42.33	W 103 29 11.24
	4100.00	1.78	35.14	4098.37	8.32	-47.04	8.20	0.04	556992.96	761016.80	N 32 31 42.35	W 103 29 11.22
	4200.00	1.69	35.41	4198.33	10.06	-44.56	9.95	0.09	556995.44	761018.55	N 32 31 42.38	W 103 29 11.20
	4300.00	1.65	36.77	4298.29	11.77	-42.21	11.66	0.06	556997.79	761020.26	N 32 31 42.40	W 103 29 11.18
	4400.00	1.99	37.44	4398.24	13.68	-39.68	13.58	0.34	557000.32	761022.18	N 32 31 42.42	W 103 29 11.15
	4500.00	1.99	39.68	4498.17	15.84	-36.96	15.75	0.08	557003.04	761024.35	N 32 31 42.45	W 103 29 11.13
	4600.00	2.00	40.05	4598.11	18.06	-34.29	17.98	0.02	557005.71	761028.58	N 32 31 42.48	W 103 29 11.10
	4700.00	2.29	35.02	4698.04	20.33	-31.32	20.25	0.35	557008.68	761028.85	N 32 31 42.51	W 103 29 11.08
	4800.00	2.66	31.93	4797.95	22.69	-27.71	22.62	0.39	557012.29	761031.22	N 32 31 42.54	W 103 29 11.05
	4900.00	2.29	29.76	4897.86	24.90	-24.01	24.84	0.38	557015.99	761033.44	N 32 31 42.58	W 103 29 11.02
	5000.00	2.42	39.96	4997.77	27.24	-20.66	27.19	0.44	557019.34	761035.79	N 32 31 42.61	W 103 29 10.99
	5100.00	2.20	54.48	5097.69	30.15	-17.92	30.11	0.62	557022.08	761038.71	N 32 31 42.64	W 103 29 10.96
	5200.00	2.14	53.72	5197.62	33.21	-15.70	33.17	0.07	557024.30	761041.77	N 32 31 42.66	W 103 29 10.92
	5300.00	2.63	51.74	5297.53	36.51	-13.18	36.48	0.50	557026.82	761045.08	N 32 31 42.69	W 103 29 10.88
	5400.00	2.86	50.22	5397.42	40.22	-10.16	40.20	0.24	557029.84	761048.80	N 32 31 42.71	W 103 29 10.84
	5500.00	2.53	55.16	5497.31	43.95	-7.30	43.93	0.40	557032.70	761052.53	N 32 31 42.74	W 103 29 10.80
	5600.00	2.41	58.46	5597.22	47.54	-4.94	47.53	0.19	557035.08	761056.13	N 32 31 42.77	W 103 29 10.75
	5700.00	2.84	60.93	5697.11	51.49	-2.64	51.49	0.44	557037.36	761060.09	N 32 31 42.79	W 103 29 10.71
	5800.00	2.30	74.72	5797.01	55.59	-0.91	55.59	0.82	557039.09	761064.19	N 32 31 42.81	W 103 29 10.66

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	5900.00	1.51	91.89	5896.96	58.84	-0.42	58.84	0.97	557039.58	761067.44	N 32 31 42.81	W 103 29 10.62
	6000.00	1.37	101.27	5996.92	61.33	-0.70	61.33	0.27	557039.30	761069.93	N 32 31 42.81	W 103 29 10.59
	6100.00	1.32	102.83	6096.90	63.63	-1.19	63.63	0.06	557038.81	761072.23	N 32 31 42.80	W 103 29 10.57
	6200.00	1.08	109.00	6196.87	65.64	-1.75	65.64	0.27	557038.25	761074.24	N 32 31 42.80	W 103 29 10.54
	6300.00	1.07	106.13	6296.86	67.43	-2.32	67.43	0.05	557037.68	761076.03	N 32 31 42.79	W 103 29 10.52
	6400.00	0.93	105.09	6396.84	69.12	-2.79	69.11	0.14	557037.21	761077.71	N 32 31 42.79	W 103 29 10.50
	6500.00	0.83	104.78	6496.83	70.60	-3.18	70.59	0.10	557036.82	761079.19	N 32 31 42.78	W 103 29 10.49
	6600.00	0.79	110.70	6596.82	71.95	-3.61	71.94	0.09	557036.39	761080.54	N 32 31 42.78	W 103 29 10.47
	6700.00	0.72	129.60	6696.81	73.08	-4.26	73.07	0.26	557035.74	761081.67	N 32 31 42.77	W 103 29 10.46
	6800.00	0.68	130.35	6796.80	74.02	-5.04	74.00	0.04	557034.96	761082.60	N 32 31 42.76	W 103 29 10.45
	6900.00	0.75	131.56	6896.80	74.96	-5.86	74.95	0.07	557034.14	761083.54	N 32 31 42.75	W 103 29 10.43
	7000.00	0.82	135.12	6996.79	75.96	-6.80	75.94	0.09	557033.20	761084.54	N 32 31 42.75	W 103 29 10.42
	7100.00	0.88	128.33	7096.78	77.07	-7.78	77.05	0.12	557032.22	761085.65	N 32 31 42.74	W 103 29 10.41
	7200.00	1.48	128.54	7196.75	78.68	-9.07	78.66	0.60	557030.93	761087.26	N 32 31 42.72	W 103 29 10.39
	7300.00	1.46	130.31	7296.72	80.67	-10.69	80.64	0.05	557029.31	761089.24	N 32 31 42.71	W 103 29 10.37
	7400.00	1.83	134.23	7396.68	82.79	-12.63	82.76	0.39	557027.37	761091.36	N 32 31 42.69	W 103 29 10.34
	7500.00	1.61	137.61	7496.63	84.89	-14.78	84.85	0.24	557025.22	761093.45	N 32 31 42.67	W 103 29 10.32
	7600.00	1.55	140.60	7596.60	86.70	-16.87	86.65	0.10	557023.13	761095.25	N 32 31 42.64	W 103 29 10.30
	7700.00	1.54	142.08	7696.56	88.39	-18.97	88.34	0.04	557021.03	761096.94	N 32 31 42.62	W 103 29 10.28
	7800.00	1.40	145.35	7796.53	89.91	-21.04	89.86	0.16	557018.96	761098.46	N 32 31 42.60	W 103 29 10.26
	7900.00	1.44	149.04	7896.50	91.26	-23.12	91.20	0.10	557016.88	761099.80	N 32 31 42.58	W 103 29 10.25
	8000.00	1.53	162.15	7996.46	92.32	-25.47	92.25	0.35	557014.53	761100.85	N 32 31 42.56	W 103 29 10.23
	8100.00	1.06	165.91	8096.44	92.96	-27.63	92.89	0.48	557012.37	761101.49	N 32 31 42.54	W 103 29 10.23
	8200.00	0.88	167.48	8196.42	93.36	-29.28	93.28	0.18	557010.72	761101.88	N 32 31 42.52	W 103 29 10.22
	8300.00	0.91	170.03	8296.41	93.66	-30.81	93.58	0.05	557009.19	761102.18	N 32 31 42.51	W 103 29 10.22
	8400.00	0.99	168.42	8396.40	93.98	-32.44	93.90	0.08	557007.56	761102.49	N 32 31 42.49	W 103 29 10.22
	8500.00	1.17	167.92	8496.38	94.37	-34.29	94.28	0.18	557005.71	761102.88	N 32 31 42.47	W 103 29 10.21
	8600.00	1.17	167.39	8596.36	94.81	-36.28	94.72	0.01	557003.72	761103.32	N 32 31 42.45	W 103 29 10.21
	8700.00	1.03	165.49	8696.34	95.26	-38.15	95.17	0.14	557001.85	761103.77	N 32 31 42.43	W 103 29 10.20
	8800.00	0.92	132.79	8796.33	96.08	-39.56	95.98	0.56	557000.44	761104.58	N 32 31 42.42	W 103 29 10.19
	8900.00	0.97	99.05	8896.31	97.51	-40.24	97.41	0.55	556999.76	761106.01	N 32 31 42.41	W 103 29 10.18
	9000.00	1.15	97.55	8996.30	99.34	-40.51	99.24	0.18	556999.49	761107.84	N 32 31 42.41	W 103 29 10.15
	9100.00	1.12	92.52	9096.28	101.31	-40.68	101.21	0.10	556999.32	761109.81	N 32 31 42.41	W 103 29 10.13
	9200.00	1.17	106.38	9196.26	103.27	-41.01	103.16	0.28	556998.99	761111.76	N 32 31 42.40	W 103 29 10.11
	9300.00	2.10	107.22	9296.22	106.00	-41.84	105.89	0.93	556998.16	761114.49	N 32 31 42.40	W 103 29 10.08
	9400.00	1.38	108.75	9396.17	108.89	-42.77	108.78	0.72	556997.23	761117.38	N 32 31 42.39	W 103 29 10.04
	9500.00	0.74	129.31	9496.15	110.54	-43.57	110.42	0.73	556996.43	761119.02	N 32 31 42.38	W 103 29 10.02
	9600.00	0.85	129.36	9596.14	111.61	-44.45	111.50	0.11	556995.55	761120.10	N 32 31 42.37	W 103 29 10.01
	9700.00	0.63	110.80	9696.13	112.70	-45.11	112.59	0.32	556994.89	761121.18	N 32 31 42.36	W 103 29 10.00
	9800.00	0.74	69.85	9796.13	113.82	-45.09	113.71	0.49	556994.91	761122.30	N 32 31 42.36	W 103 29 9.99
	9900.00	0.56	55.19	9896.12	114.83	-44.58	114.71	0.24	556995.42	761123.31	N 32 31 42.37	W 103 29 9.97
	10000.00	0.33	36.64	9996.12	115.40	-44.07	115.29	0.27	556995.93	761123.88	N 32 31 42.37	W 103 29 9.97
	10100.00	0.74	65.07	10096.11	116.15	-43.57	116.04	0.48	556996.43	761124.64	N 32 31 42.38	W 103 29 9.96
	10200.00	0.82	77.22	10196.10	117.44	-43.14	117.33	0.18	556996.86	761125.92	N 32 31 42.38	W 103 29 9.94
	10239.00	1.06	72.64	10235.10	118.05	-42.97	117.94	0.64	556997.03	761126.54	N 32 31 42.38	W 103 29 9.94
	10270.00	1.14	63.33	10266.09	118.60	-42.75	118.49	0.63	556997.25	761127.09	N 32 31 42.39	W 103 29 9.93
	10302.00	1.06	63.68	10298.09	119.15	-42.47	119.04	0.25	556997.53	761127.64	N 32 31 42.39	W 103 29 9.92
	10334.00	1.14	62.27	10330.08	119.70	-42.19	119.59	0.26	556997.81	761128.19	N 32 31 42.39	W 103 29 9.92
	10366.00	4.31	79.06	10362.04	121.16	-41.82	121.05	10.11	556998.18	761129.65	N 32 31 42.40	W 103 29 9.90
	10397.00	6.68	103.14	10392.90	124.06	-42.01	123.95	10.51	556997.99	761132.55	N 32 31 42.39	W 103 29 9.87
	10429.00	5.63	102.44	10424.72	127.41	-42.77	127.30	3.29	556997.23	761135.90	N 32 31 42.39	W 103 29 9.83
	10461.00	8.53	113.07	10456.47	131.13	-44.04	131.01	9.91	556995.96	761139.61	N 32 31 42.37	W 103 29 9.78
	10493.00	12.66	122.04	10487.92	136.29	-46.83	136.17	13.86	556993.17	761144.77	N 32 31 42.34	W 103 29 9.72
	10524.00	16.88	121.60	10517.89	143.02	-50.99	142.89	13.62	556989.01	761151.49	N 32 31 42.30	W 103 29 9.65
	10556.00	21.02	122.65	10548.15	151.83	-56.52	151.68	12.98	556983.48	761160.28	N 32 31 42.25	W 103 29 9.54
	10585.00	25.50	122.43	10574.78	161.50	-62.68	161.34	15.45	556977.32	761169.93	N 32 31 42.19	W 103 29 9.43
	10616.00	29.50	122.67	10602.28	173.58	-70.38	173.40	12.91	556969.62	761182.00	N 32 31 42.11	W 103 29 9.29
	10648.00	33.24	121.15	10629.59	187.74	-79.17	187.54	11.95	556960.83	761196.14	N 32 31 42.02	W 103 29 9.13
	10680.00	36.58	120.06	10655.83	203.53	-88.49	203.30	10.62	556951.51	761211.90	N 32 31 41.93	W 103 29 8.94
	10711.00	39.48	115.09	10680.25	220.48	-97.30	220.23	13.60	556942.70	761228.83	N 32 31 41.84	W 103 29 8.75
	10743.00	42.65	114.13	10704.38	239.61	-106.05	239.34	10.10	556933.95	761247.94	N 32 31 41.75	W 103 29 8.52
	10775.00	47.22	112.18	10727.03	260.42	-114.92	260.12	14.91	556925.08	761268.72	N 32 31 41.66	W 103 29 8.28
	10807.00	51.09	110.44	10747.95	282.99	-123.70	282.67	12.77	556916.30	761291.27	N 32 31 41.57	W 103 29 8.02
	10839.00	55.05	107.64	10767.18	307.19	-132.03	306.85	14.21	556907.97	761315.44	N 32 31 41.49	W 103 29 7.74
	10869.00	59.71	105.56	10783.34	331.42	-139.23	331.06	16.59	556900.77	761339.65	N 32 31 41.41	W 103 29 7.46
	10901.00	64.46	105.23	10798.32	358.69	-146.74	358.31	14.87	556893.27	761366.91	N 32 31 41.34	W 103 29 7.14
	10933.00	69.96	103.96	10810.71	387.25	-154.16	386.85	17.57	556885.84	761395.45	N 32 31 41.26	W 103 29 6.81
	10965.00	75.09	103.55	10820.32	416.90	-161.41	416.49	16.08	556878.59	761425.09	N 32 31 41.19	W 103 29 6.46
	10993.00	79.36	101.75	10826.51	443.56	-167.39	443.13	16.49	556872.61	761451.72	N 32 31 41.13	W 103 29 6.15
	11025.00	84.33	100.60	10831.05	474.64	-173.52	474.19	15.93	556866.48	761482.79	N 32 31 41.06	W 103 29 5.79
	11057.00	87.93	98.96	10833.21	506.11	-178.95	505.65	12.36	556861.06	761514.24	N 32 31 41.01	W 103 29 5.42
	11153.00	91.54	93.16	10833.65	601.54	-189.07	601.06	7.12	556850.93	761609.65	N 32 31 40.90	W 103 29 4.31
	11249.00	90.22	92.96	10832.18	697.40	-194.20	696.91	1.39	556845.80	761705.50	N 32 31 40.84	W 103 29 3.19
	11346.00	90.22	91.57	10831.80	794.33	-198.03	793.83	1.43	556841.97	761802.42	N 32 31 40.80	W 103 29 2.06
	11442.00	90.66	89.84	10831.07	890.32	-199.21	889.81	1.86	556840.79	761898.40	N 32 31 40.78	W 103 29 0.94
	11538.00	90.13	88.52	10830.41	986.30	-197.84	985.80	1.48	556842.16	761994.39	N 32 31 40.78	W 103 28 59.81
	11634.00	90.75	86.91	10829.67	1082.21	-194.01	1081.72	1.80	556845.99	762090.30	N	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	12194.00	87.76	84.77	10826.98	1640.49	-154.35	1640.10	0.27	556885.65	762648.68	N 32 31 41.16	W 103 28 52.17
	12287.00	88.20	85.12	10830.25	1733.05	-146.16	1732.68	0.60	556893.84	762741.25	N 32 31 41.24	W 103 28 51.09
	12379.00	89.34	85.65	10832.23	1824.71	-138.76	1824.36	1.37	556901.24	762832.93	N 32 31 41.30	W 103 28 50.02
	12472.00	89.87	86.09	10832.87	1917.45	-132.06	1917.11	0.74	556907.94	762925.69	N 32 31 41.36	W 103 28 48.93
	12564.00	90.92	86.27	10832.24	2009.22	-125.94	2008.91	1.16	556914.07	763017.48	N 32 31 41.41	W 103 28 47.86
	12657.00	89.87	86.70	10831.59	2102.03	-120.23	2101.73	1.22	556919.77	763110.30	N 32 31 41.46	W 103 28 46.77
	12750.00	88.55	86.97	10832.88	2194.86	-115.10	2194.58	1.45	556924.90	763203.14	N 32 31 41.51	W 103 28 45.69
	12842.00	88.81	87.14	10835.00	2286.70	-110.37	2286.43	0.34	556929.63	763295.00	N 32 31 41.55	W 103 28 44.62
	12936.00	89.43	87.32	10836.44	2380.57	-105.83	2380.31	0.69	556934.17	763388.87	N 32 31 41.58	W 103 28 43.52
	13028.00	90.22	87.58	10836.72	2472.47	-101.74	2472.22	0.90	556938.26	763480.78	N 32 31 41.62	W 103 28 42.45
	13120.00	89.34	87.14	10837.07	2564.36	-97.50	2564.12	1.07	556942.50	763572.68	N 32 31 41.65	W 103 28 41.37
	13212.00	89.87	87.14	10837.71	2656.23	-92.91	2656.00	0.58	556947.09	763664.56	N 32 31 41.69	W 103 28 40.30
	13306.00	90.84	87.06	10837.13	2750.09	-88.16	2749.88	1.04	556951.85	763758.43	N 32 31 41.73	W 103 28 39.20
	13399.00	90.48	86.79	10836.05	2842.94	-83.17	2842.74	0.48	556956.83	763851.29	N 32 31 41.77	W 103 28 38.12
	13492.00	89.96	87.67	10835.70	2935.82	-78.67	2935.62	1.10	556961.33	763944.18	N 32 31 41.81	W 103 28 37.03
	13584.00	87.32	87.32	10837.88	3027.68	-74.65	3027.50	2.89	556965.35	764036.06	N 32 31 41.84	W 103 28 35.96
	13677.00	86.79	87.58	10842.66	3120.46	-70.52	3120.29	0.63	556969.48	764128.84	N 32 31 41.87	W 103 28 34.87
	13769.00	87.49	87.94	10847.25	3212.26	-66.93	3212.10	0.86	556973.07	764220.65	N 32 31 41.90	W 103 28 33.80
	13861.00	89.34	88.81	10849.79	3304.18	-64.32	3304.02	2.22	556975.88	764312.58	N 32 31 41.92	W 103 28 32.73
	13954.00	91.28	89.43	10849.29	3397.16	-62.89	3397.01	2.19	556977.11	764405.56	N 32 31 41.93	W 103 28 31.64
	14046.00	90.48	88.55	10847.88	3489.13	-61.27	3488.98	1.29	556978.73	764497.53	N 32 31 41.94	W 103 28 30.57
	14139.00	88.81	87.50	10848.45	3582.06	-58.07	3581.92	2.12	556981.93	764590.47	N 32 31 41.96	W 103 28 29.48
	14231.00	88.64	86.70	10850.50	3673.90	-53.42	3673.78	0.89	556986.59	764682.32	N 32 31 42.00	W 103 28 28.41
	14324.00	90.04	86.79	10851.57	3766.73	-48.14	3766.62	1.51	556991.87	764775.16	N 32 31 42.04	W 103 28 27.32
	14417.00	91.36	87.06	10850.44	3859.57	-43.15	3859.48	1.45	556996.85	764868.02	N 32 31 42.09	W 103 28 26.24
	14510.00	91.45	87.58	10848.16	3952.43	-38.80	3952.35	0.57	557001.20	764960.89	N 32 31 42.12	W 103 28 25.15
	14603.00	89.08	86.97	10847.73	4045.31	-34.38	4045.23	2.63	557005.62	765053.77	N 32 31 42.16	W 103 28 24.07
	14696.00	88.81	87.32	10849.44	4138.16	-29.75	4138.10	0.48	557010.25	765146.64	N 32 31 42.20	W 103 28 22.98
	14789.00	89.96	87.41	10850.44	4231.05	-25.47	4231.00	1.24	557014.53	765239.53	N 32 31 42.23	W 103 28 21.90
	14882.00	91.01	87.41	10849.65	4323.94	-21.27	4323.90	1.13	557018.73	765332.43	N 32 31 42.27	W 103 28 20.81
	14974.00	89.87	87.94	10848.94	4415.85	-17.54	4415.82	1.37	557022.46	765424.35	N 32 31 42.29	W 103 28 19.74
	15067.00	89.96	87.85	10849.08	4508.77	-14.12	4508.75	0.14	557025.88	765517.29	N 32 31 42.32	W 103 28 18.65
Final Survey	15102.00	90.04	87.85	10849.08	4543.75	-12.81	4543.73	0.23	557027.19	765552.26	N 32 31 42.33	W 103 28 18.24
Projection to TD	15180.00	90.04	87.85	10849.03	4621.68	-9.88	4621.67	0.00	557030.12	765630.21	N 32 31 42.35	W 103 28 17.33

Survey Type: Non-Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	17.000	Act Stns	30.000	30.000	SLB_NSG+MSHOT-Depth Only	Original Borehole / COG Stratocone 32 State #1H Gyro Off- 10600ft
	17.000	10200.000	Act Stns	30.000	30.000	SLB_NSG+MSHOT	Original Borehole / COG Stratocone 32 State #1H Gyro Off- ST01 / COG Stratocone 32 State
	10200.000	15180.000	Act Stns	30.000	30.000	SLB_MWD-STD	#1H MWD 10200ft - Update

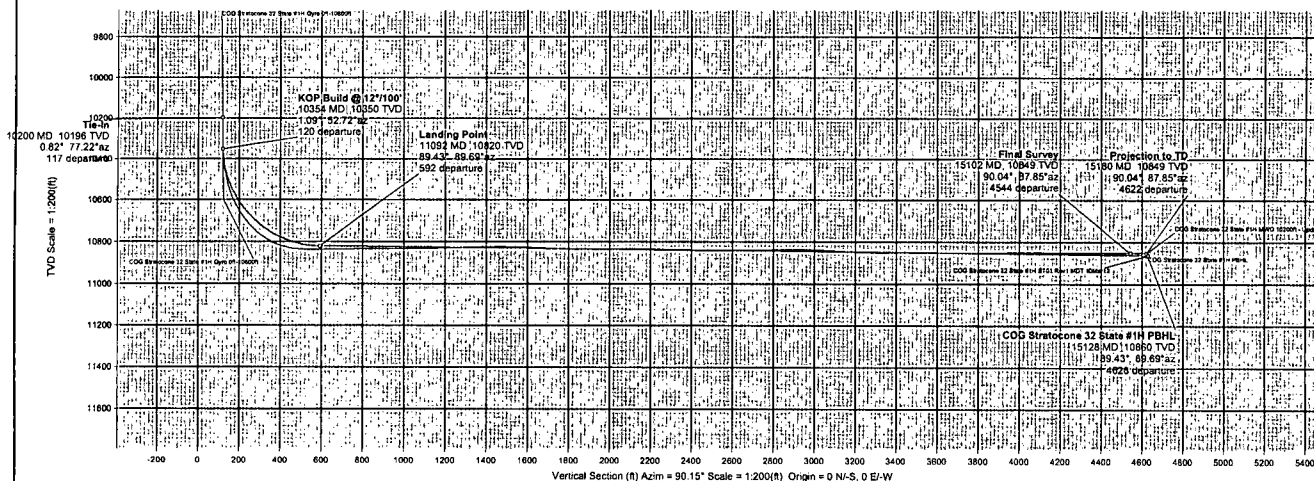
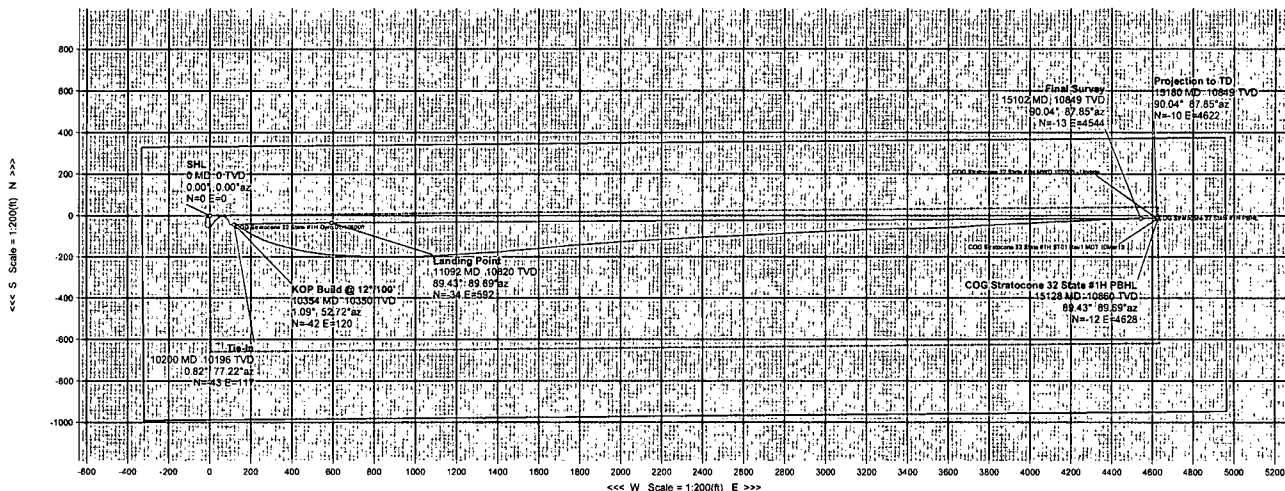
WELL	Stratocone 32 State #1H	FIELD	NM Lea County (NAD 27)	STRUCTURE	McVay 7
Magnetic Parameters	Dip: 60.406° Mag Dec: 7.470°	Date: February 08, 2013 Elev: 48524 TdL	Surface Location Lat: N 32 31 42.818 Long: W 103 29 11.359	NAD27 New Mexico State Plane, Eastern Zone, US Feet Northing: 557040.00 NUS Easting: 761068.60 NUS Scale Factor: 0.99998711	Miscellaneous Slot: Stratocone 32 State #1H Plan: Rev 1 MDT 10Mar13 TVD Ref: KKB(37518 above) Srv Date: February 08, 2013

Legend

COG Stratocone 32 State #1H Lateral Line
COG Stratocone 32 State #1H Taper
COG Stratocone 32 State #1H 100' MD
COG Stratocone 32 State #1H 100' MD 100' MD
COG Stratocone 32 State #1H 100' MD 100' MD
COG Stratocone 32 State #1H 100' MD 100' MD



Grid North
Tot Corr (M->G)
7.0145°
Mag Dec (7.470°)
Grid Conv (0.455°)



Drawn By: Current User
Date Created: March 10, 2013 04:17:56 PM
Checked By:
Checked Date:
Approved By:
Approved Date: